

POLUSHINA, T.V.; ~~CHER~~YAK, V.Ya.; ROZENBERG, G.Ya.

Production of ~~the blood~~ substitute polyglucin Report No.1.
by the method of selective synthesis. ~~ad.~~ prom. ~~26~~ no.2:
15-19 F '62. (MIRA 15:3)

1. TSentral'nyy ordena Lenina institut gematologii i
perelivaniya krovi. (DEXTRAN)

POLUSHINA, T.V.; RUDNITSKAYA, M.Z.; GRIGOR'YEVA, O.V.

Antishock fluid on the basis of plasma albumin in donor blood.
Probl. gemat. i perel. krovi 5 no.3:52-55 Mr '60. (MIRA 14:5)

1. Iz Tsentral'nogo ordena Lenina instituta gematologii i perelivaniya
krovi (dir. - deystvitel'nyy chlen AMN SSSR prof. A.A. Bogdasarov).
(SHOCK) (ALBUMINS--THERAPEUTIC USE)

RUDASHEVSKAYA, M.M.; POLUSHINA, T.V.

Study of the structure of crude dextran and polyglycine. Probl.
gemat. i perel. krovi 5 no. 8:42-43 Ag '60. (MIRA 14:1)
(LEXTRAN)

LENSKAYA, R.V.; POLUSHINA, T.V.

Use of polyglucin for a study of blood vessel permeability in
dogs in acute radiation sickness. Probl. gemat. i perel. krovi
5 no. 9:57-60 '60. (MIRA 14:1)
(RADIATION SICKNESS) (DEXTRAN) (BLOOD VESSELS--PERMEABILITY)

POZHENBERG, G.Ya.; POIUSKINA, T.V.

ROZENBERG, G.Ya.; POIUSKINA, T.V.

Drying blood substitutes in a spray drier. Med.prom.12 no.3:43-45
Mr '58. (MIRA 11:4)

1. Tsentral'nyy institut gemtologii i perelivaniya krovi
Ministerstva zdravookhraneniya SSSR.
(BLOOD PLASMA SUBSTITUTES--DRYING)

POLUSHINA, T. V.

✓ The synthetic blood substitute polyglyukin. G. Ya. Rosenber and T. V. Polushina. *Problemy Gematol.* 1

Periustiya Kromi 1, No. 1, 49-52(1956).—Dextran, which is used in the blood substitute polyglyukin (I), is prepd. in 2 steps: 1) synthesis of dextran by *Leuconostoc mesenteroides*; the crude dextran thus resulting is a polydispersed substance having a mol. wt. up to 35×10^4 . It is a linear polymer of glucose having side chains; the glucose mols. in dextran are interconnected by 1:6, 1:4, and 1:3 glucoside bonds. 2) The final clinical material is prepd. by a partial HCl hydrolysis of the crude high-mol. dextran. The hydrolyzed material is fractionated, as described, and the fractions having an av. mol. wt. of 10^4 selected for further purification. A 6% soln. of the finally purified fraction is prepd. in physiol. saline and the H₂O-sol. portion of this fraction is free from systemic reaction, and the use of only this portion is recommended. I prepd. in the lab. and commercially has a relative (H₂O) viscosity of 2.5-3.1 and an osmotic pressure of 500-950 mm. of H₂O. The best hemodynamic effects are produced by I preps. which have a relative viscosity of 2.8-3.0 and an osmotic pressure of 800-900 mm. Expts. with rabbits showed that I is not pyrogenic and produces no toxic or other unfavorable systemic reactions. I preps. may cause a drop in the temp. of rabbits after a single

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ROZENBERG, G. Ya. AND BLUSHINA, T. V.
 or repeated administration of 10 ml. per kg. of animal. I
 preps. free from general systemic reactions had a N con-
 tent of 0.002-0.003%. The injection into the rabbit of 10
 ml. of the prepn. per kg. of body wt. (once or repeatedly)
 produced edemas of the kidney epithelial canaliculi of a
 reversible type. I effects a permanent restoration of the
 blood pressure of heavily bled exptl. animals. Injection of I
 into critically exsanguinated dogs restored their heart
 rhythm to normal; the same is true of the O_2/CO_2 exchange.
 In the process of compensation of disturbed respiration in
 acute anemia hypoxia the most important factor resides in
 the cardiovascular system. Dextran has the ability to com-
 pletely restore the hemodynamic processes. Good per-
 manent hemodynamic improvement was attainable in
 instances in which I persisted in the blood circulation for
 3-4 days, and its elimination within the first 24 hrs. did not
 exceed 50%.

B. S. Levine

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POLUSHINA, T.V., GARFUNKEL', M.L., and NEMENOVA, N.M.

"Concerning Pathological Anatomy of Experimental Shock States (Report II)," by N. M. Nemenova, M. L. Garfunkel', and T. V. Polushina, Central Order of Lenin Institute of Hematology and Blood Transfusion (director, Prof A. A. Bagdasarov, Corresponding Member, Academy of Medical Sciences USSR), Ministry of Health USSR, Problemy Gematologii i Perelivaniya Krovi, Vol 1, No 6, Nov/Dec, pp 55-60 -1977

Tests were run on dogs to study pathological changes following traumatic shock (47 experiments), severe blood loss (35 experiments) and spinal shock (25 experiments).

The authors conclude that the pathological changes observed during early periods of various shock conditions are morphological expressions of profound disorders of blood and lymph circulation, that they are commensurate with the state of shock, and that all shock conditions are similar in nature.

SUM. I287

These morphological changes (illustrated by photomicrographs) reflect the response of an organism to a shock-producing factor, i.e., functions of compensatory mechanisms. Blood reaction is connected with this factor. Compensatory mechanisms of an organism are very strong in blood transfusion, nonlethal hemorrhage, and anaphylactic shock, but they are very weak in traumatic shock and absent in spinal shock.

By the use of effective therapeutic measures, it is possible to stimulate the basic protective powers of an organism, pull it out of shock, and prevent delayed irreversible changes from setting in.

AUTHOR: Polushkin, A. A. S/170/59/002/10, 019/020
B115/B007

TITLE: The Critical Remarks by L. D. Berman

PERIODICAL: Inzhenerno-fizicheskii zhurnal, 1959, Vol 2, Nr 10,
pp 107-112 (USSR)

ABSTRACT: In reply to the criticism of one of the author's articles
(Ref 1) by L. D. Berman it is stated that the latter has wrong
conceptions of the physics of energy- and mass transfer and
that his criticism is not justified. The evaporation of a
liquid with a free surface is dealt with, round which a plane-
parallel flow of a mixture of air and steam flows. Here a
macroscopic motion (convective transfer) of the entire air-
steam mixture from the liquid surface to the neighborhood
occurs with a velocity w_0 (Fig 1). In the equation of flow (1)
the last term on the right side is wrong. Errors in defining
the boundary condition in the formulation according to L. D.
Berman are referred to, and further, the papers by N. I. Sazon-
vantsev (Ref 6), P. M. Polonskaya (Ref 7), P. D. Lebedev
(Ref 8), and B. M. Smol'skiy (Ref 11) are mentioned in proof
of the statements made by the author. Finally, it is pointed

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POLUSHKIN, A.A.

Generators of infrared radiation Inzh.-fiz.zhur. no.7:116-112
Jl '58. (MIRA 11:8)

1. Politekhniicheskiy institut, Gor'kiy.
(Infrared rays--Industrial applications)

POLUSHKIN, A.A.

Criteria for the similarity of heat and mass exchange in evaporation processes of liquids. Inzh.-fiz.zhur. no.2:129-144 P '59.
(MIRA 12:3)

1. Politekhnikheskiy institut imeni A.A. Zhdanova, g.Gor'kiy.
(Mass transfer) (Heat--Transmission)

POLUSHKIN, A.A.

Designing heat-radiation dryers. Inzh.-fiz.zhurn. no.10:117-119
0 '58. (MIRA 11:11)

1. Politekhnikheskiy institut imeni A.A.Zhdanova, g. Gor'kiy.
(Drying apparatus)

POLUSHKIN, A.A., kand. tekhn. nauk.

Combined drying of chemical products. Khim. prom. no.2:111-113
Mr '58. (MIRA 11:5)

1. Gor'kovskiy politekhnicheskii institut im. A.A. Zhdanova.
(Drying apparatus)

POLUSHKIN, A.A.

Convective heat exchange in problems involving an internal
heat source. Inzh.-fiz.zhur. no.2:103-105 F '58.
(MIRA 13:1)

1. Politekhnikheskiy institut im.A.A.Zhdanova, g.Gor'kiy.
(Heat--Convection)

24(8)

06402

SOV/170-59-2-20/23

AUTHOR: Polushkin, A.A.

TITLE: On Criteria of Similarity of Heat and Mass Transfer in Processes of Evaporation of Liquids

PERIODICAL: Inzhenerno-fizicheskii zhurnal, 1959, Nr 2, pp 129-144 (USSR)

ABSTRACT: Many studies in the USSR and abroad deal with the process of liquid evaporation from the free surface, which were reviewed by A.V. Nesterenko [Ref 3] and in the monographs [Refs 4,5]. However, there is no firmly established standpoint on many basic problems in this process. Various criteria of similarity are proposed, in particular by L.D. Berman [Refs 6-11]. The author starts his analysis by deriving basic differential equations of heat and mass transfer, Formulae 17 and 18, and transfer equations for the case of evaporation of a liquid from a free surface. Formulae 32-35, from which the well-known criteria of similarity: Ar , Re , Pr , Pr' , Nu , Nu' , K_p can be obtained, if boundary conditions are taken into consideration. Berman proposes other equations and other criteria which are, as the author shows, incorrectly derived. Then the author analyzes a so-called Gukhman's criterion which was introduced by F.M. Polonskaya [Ref 15] and dealt with in the papers of L.S. Klyachko

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SOV/170-59-2-20/23

On Criteria of Similarity of Heat and Mass Transfer in Processes of Evaporation of Liquids

[Ref 20], A.A. Gukhman [Ref 12] and A.V. Lykov [Ref 1]. The author holds that the introduction of this and other analogous criteria needs a special and more profound substantiation. Another process of heat and mass transfer, that occurring during the drying of moist bodies, was experimentally investigated by N.S. Mikheyeva [Ref 21], G.A. Maksimov [Ref 22], P.D. Lebedev [Ref 2] and B.M. Smol'skiy [Ref 4]. Lebedev proposed a calculating formula in the form of criterial relationships, Formula 59 in the text, which is valid for the period of decreasing rate of the drying process. The author holds that transfer phenomena in the boundary layer should be investigated by studying the fields of temperature, moisture content and the velocity of the vapor-gas mixture close to the surface of the body. The problem of the effect of body dimensions on the process of heat and mass

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GARTUNG, Sergey Vasil'yevich; DUBKOV, Dmitriy Mikhailovich; POLUSHKIN, Aleksey Mitrofanovich; AVAYEV, S.A., retsenzent; GORODOV, K.I., retsenzent; KRILOV, A.P., retsenzent; POLOZOV, A.I., retsenzent, [deceased]; SMOV, D.A., retsenzent; LIOZNOV, A.G., redaktor; NEKRASOVA, O.I., tekhnicheskii redaktor.

[Manual for engineers in textile industry] Spravochnik energetika tekstil'noy promyshlennosti. Moskva, Gos.nauchno-tekhn.izd-vo Ministerstva promysh.tovarov shirokogo potrebleniia SSSR. Vol. 1 [Electric engineering] 1955. 630 p. (MLRA 8:12)
(Electric engineering)

POLUSHKIN, B. V., CAND MED SCI, "OVALBUMIN SHOCK AND
CERTAIN PROBLEMS OF TACHYPHYLAXIS." BARNAUL, 1958.
(SECOND MOSCOW^W STATE MED INST IM N. I. PIROGOV). (KL,
3-61, 234).

450

POLUSHKIN, B.V.

"Mode of action of bacteria on the nervous system. Zhur. mikrobiol. epid.
i immun. 29 no.12:115-116 D '58. (MIRA 12:1)
(VACCINES)

BARKAGAN, Z.S.; POLUSHKIN, B.V. (Barnaul)

Significance of blood coagulation in the mechanism of snake venom poisoning. Pat.fiziol.i eksp. terap. 4 no.2:48-54 Mr-Apr '60.
(MIRA 14:5)

1. Iz kafedry propedevtiki vnutrennikh bolezney (zav. - dotsent Z.S.Barkagan) i kafedry patofiziologii (zav. - dotsent R.G.Teregulov) Altayskogo meditsinskogo instituta.
(BLOOD—COAGULATION) (VENOM)

POLUSHKIN, B.V. (Burnaul)

High sensitivity of rats to the parenteral administration of ovalbumin; review of literature. Pat. fiziol. i eksp. terap. 6 no.6:86-88 N-D'62 (MIRA 17:3)

1. Iz kafedry patologicheskoy fiziologii (zav. - dotsent R.G. Teregulov) Altayskogo meditsinskogo instituta.

POLUSHKIN, B.V. (Barnaul)

On S.M.Pavlenko's article "Shortcomings in the curriculum of medical schools and a reorganization of instruction in pathophysiology in the light of the law 'On the strengthening the bond between school and society.'" Pat.fiziol.i eksp.terap. 4 no.4:91- JI-Ag '60. (MIRA 14:5)
(PHYSIOLOGY, PATHOLOGICAL STUDY AND TEACHING)
(PAVLENKO, S.M.)

POLUSHKIN, B.V. (Barnaul)

Tachyphylaxis. Usp. sov. biol. 50 no.3:349-361 N-D '60.
(MIRA 14:3)
(IMMUNITY)

POLUSHKIN, D. V.; SUKHOVEYEVA, Ye. Ya.

Content of serotonin (5-hydroxytryptamine) in the blood of patients with different forms of hemophilia. Probl. gemat. i perel. krovi no.8:31-33 '62. (MIRA 15:7)

1. Iz kafedry propedevtiki vnutrennikh bolezney (zav. - dotsent Z. S. Barkagan) i patologicheskoy fiziologii (zav. - dotsent A. V. Let'yan) Altayskogo gosudarstvennogo meditsinskogo instituta.

(HEMOPHILIA) (SEROTONIN)

POLUSHKIN, B.V. (Barnaul)

"Passive" sensitization of rabbits to egg white using the serum
of white rats. Arkh. pat. 25 no.7:68-72 '63 (MIRA 16:12)

1. Iz kafedry patologicheskoy fiziologii (zav. - dotsent A.V.
Ist'yen) Altayskogo meditsinskogo instituta.

DOROFYEV, V.M.; POLUSHKIN, B.V.; TSYRAN, N.I.

Thermal and anaphylactoid edemas in acute radiation sickness.
Vest. AMN SSSR 20 no.9:78-83 '65.

(MIRA 18:11)

1. Institut meditsinskoy radiologii AMN SSSR, Obninsk.

BYKHOVSKIY, A.V.; KOMOVNIKOV, G.S.; POLUSHKIN, B.V.

Effect of symosan on the macrophagic reaction of the lungs
and phagocytosis in acute radiation sickness. Vest. AMN
SSSR 20 no.9:83-86 '65. (MIRA 18:11)

1. Institut meditsinskoy radiologii AMN SSSR, Obninsk.

BOGDANOV, N.G.; POLUSHKIN, B.V.

Increase of sensitivity to serotonin (5-hydroxytryptamine) in segments of rat colon in K-avitaminosis caused by ligation of the bile duct. Biul. eksp. biol. i med. 60 no.11:28-30 N '65.
(MIRA 19:1)

1. Kafedra biokhimii (zav. - prof. I.I. Matusis) Altayskogo meditsinskogo instituta, Barnaul. Submitted April 15, 1964.

DEDERER, Yu.M.; POLUSHKIN, B.V.; GORDELADZE, A.S. (Barnaul)

Changes in the serotonin content of the gastrointestinal tract
in experimental intestinal obstruction in rats. Pat. fiziol.
i eksp. terap. 8 no.1:52-55 Ja-F '64. (MIRA 18:2)

1. Kafedry gospi'tal'noy khirurgii, patofiziologii, patoanatomii
Altayskogo meditsinskogo instituta, Barnaul.

N/5
672
.571

FOLUSHKIN, GENNADIY FEDOROVICH

Osnovy Ustroystva i Teorii Morskikh Sudov (Principles of Construction and Theory of Naval Vessels) Moskva, Izd-vo "Morskoy Transport", 1956.
172 P. Illus., Diags.
"Literatura": P. 170

POLUSHKIN, Gennadiy Fedorovich; OGURTSOVSKIY, G.A., redaktor; ALEKSANDROV,
L.A., redaktor izdatel'stva; TIKHONOVA, Ye.A., tekhnicheskiy
redaktor

[Theory of seagoing vessels and the fundamentals of equipping them]
Osnovy ustroystva i teorii morskikh sudov. Moskva, Izd-vo "Morskoi
transport," 1956. 172 p. (MIRA 10:7)
(Ships)

MOGILAT, Ya.Ya.; KRIKLIVETS, R.N.; POLUSHKIN, G.P.

Prevention of the clogging of slag and ash lines in hydraulic
ash removal systems. Energetik 10 no.9:12 S '62.
(MIRA 17:1)

POLUSHIN, Ivan Dmitriyevich; SEMINA, V.F., red.; PECHERKAYA, T.I., tekhn.
red.

[Warm hearts] Goriachie serdtsa. Irkutsk, Irkutskoe knizhnoe izd-vo,
1960. 23 p. (MIRA 14:9)
(Angara River—Dams) (Bratsk Hydroelectric Power Station)

POLUSHKIN, I.

Third plenum of the Central Administration of the Scientific and
Technical Society of the Power Industry. Elektrichestvo no.2:94
F '65. (MIRA 18:3)

L 01207-67 EWT(m)/EWP(t)/ETI IJP(c) JD/JW/JG/AT

ACC NR: AP6030802 SOURCE CODE: UR/0185/66/011/009/0950/0956

AUTHOR: Polushkin, I. M. -- Polushkin, I. N. ; Dudko, D. Ya.

ORG: Kiev State University im. T. H. Shevchenko (Kyyvs'kyi derzhuniversytet)

TITLE: Effective cross section of electron scattering in plasma, helium, and argon with a cesium vapor admixture

SOURCE: Ukrayins'kyi fizychnyy zhurnal, v. 11, no. 9, 1966, 950-956

TOPIC TAGS: electron scattering, scattering cross section, resonator, gas discharge plasma

ABSTRACT: The authors measured the effective cross section of electron scattering by neutral atoms of a binary gas discharge plasma in inert gases of He and Ar with an admixture of Cs vapor at a pressure of ~ 2 mm Hg. Measurements were carried out by a method employing a superhigh-frequency resonator in the three-centimeter band and by a method of plasma conductivity in a d-c network. The cross section of electron scattering equals $6 \times 10^{-16} \text{ cm}^2$ for plasma in He, $2 \times 10^{-16} \text{ cm}^2$ for plasma in Ar, and $2 \times 10^{-14} \text{ cm}^2$ for plasma in Cs. Dependences of the electric-field strength and plasma conductivity in He—Cs and Ar—Cs

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L 01207-67

ACC NR: AP6030802

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on the Cs vapor pressure are given for various electric-current densities. The authors thank Professor N. D. Morgulis for his guidance in the study and graduate student Yu. Ya. Polishchuk for taking part in the work. Orig. art. has: 7 figures and 3 formulas. [Based on authors' abstract] [NT]

SUB CODE: 20/ SUBM DATE: 23Nov65/ ORIG REF: 008/ OTH REF: 005/

Card 2/2 blg

1
POLUSHKIN, I.P.

Third Plenum of the Central Administration of the Scientific
and Technical Society of the Power Industry. Elek. sta. 30
no.2:91 P '65. (MIRA 18:4)

1. Zamestitel' predsedatelya prezidiuma tsentral'nogo pravleniya
Nauchno-tekhnicheskogo obshchestva energeticheskoy promyshlennosti.

POLUSHKIN, I.P.

Third conference of the Scientific and Technical Society of the
Power Industry. Prom. energ. 19 no.3:40 Mr '64. (MIRA 17:4)

FOLUSHKIN, I.P., inzh.

Third Congress of the Scientific and Technical Society of the Power
Industry. Elektrichestvo no.4:92 Ap '64. (MIRA 17:14,

POLUSHKIN, I.P.

More attention should be paid to public inspection. Elek. sta.
34 no.9:75-76 S '63. (MIRA 16:10)

1. Zamestitel' predsedatelya Tsentral'nogo pravleniya Nauchno-
tekhnicheskogo obshchestva energeticheskoy promyshlennosti.

L 25510-66

ACC NR: AP6011403

EWT(1)/EWT(m)/ETC(f)/EWG(m)/EWP(v)/EWP(t)/EWP(k)/T/EPF(n)-2

SOURCE CODE: UR/0057/86/036/003/0542/0548

AUTHOR: Morgulis, N.D.; Polushkin, I.N.

ORG: Kiev State University (Kiyevskiy gosudarstvennyy universitet)

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B

TITLE: Charge recombination during decay of a plasma in helium or argon at high pressure with an admixture of cesium vapor

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no.3, 1966, 542-548

TOPIC TAGS: ion recombination, recombination coefficient, plasma decay, helium, argon, cesium, gas discharge plasma, high pressure

ABSTRACT: As the first stage of an investigation of discharge plasmas in inert gases containing small admixtures of alkali metal vapors, the authors have investigated decay of helium and argon plasmas containing cesium. The plasmas were produced in 1 cm diameter, 20 cm long sealed glass tubes containing helium or argon at 100-150 mm Hg by discharge of a 5 kv, 10 μ F capacitor. The discharge tube was short circuited with a thyatron some 40-100 microsec after initiation of the discharge, when the current density was 3-20 A/cm², and probe measurements were started after a further 40-80 μ sec delay. The partial pressure of cesium in the discharge tube was varied from 10⁻⁸ to 0.1 mm Hg by adjusting the temperature of a side tube containing metallic cesium. Spectra of continuous arc discharges were observed and electron temperatures were derived from line intensity ratios. When the cesium pressure was high

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L 25510-66

ACC NR: AP6011403

decay curve (reciprocal ion density versus time) consisted of two straight lines with different slopes joined by a short knee. The fact that the cesium recombination coefficient is the same in the presence of a large excess of inert gas as in pure cesium vapor and remains unchanged over a wide range of ionization indicates that molecular ions do not play a significant role in cesium recombination. It is suggested that cesium recombination is effected mainly in three-body collisions between an ion and two electrons. The recombination coefficients observed for helium and argon are too large to be accounted for by analogous three-body collisions, however, and it is suggested that molecular ions participate in the inert gas recombination process. Orig. art. has: 2 formulas and 7 figures.

SUB CODE: 20

SUBM DATE: 18Jan65

ORIG. REF: 004

OTH REF: 008

Card 3/3

PB

POLUSHKIN, K.K.; YEMEL'YANOV, I.Ya.; DELENS, P.A.; ZVONOV, N.V.; ALEKSENKO,
Yu.I.; GROZDOV, I.I.; KUZNETSOV, S.P.; SIROTKIN, A.P.; TOKAREV,
Yu.I.; LAVROVSKIY, K.P.; BRODSKIY, A.M.; BELOV, A.R.; BORISTUK,
Ye.V.; GRYAZEV, V.D.; POPOV, D.N.; KORYAKIN, Yu.I.; FILIPPOV, A.G.;
PETROCHUK, K.V.; KHOROSHAVIN, V.D.; SAVINOV, N.P.; MESHCHERYAKOV,
M.N.; PUSHKAREV, V.P.; SUROYEGIN, V.A.; GAVRILOV, P.A.; PODLAZOV,
L.N.; ROGOZHNIK, I.N.; TETYUKOV, V.D.

"Arbus" atomic power plant with organic heat transfer agent and
moderator. Atom. energ. 17 no.6:439 D '64 (MIRA 18:1)

ALEKSENKO, Yu. N.; POLUSHKIN, K. K.; ZVONOV, N. V.; TETUKOV, V. D.

"Organic moderated nuclear power plant."

report submitted for 3rd Intl Conf, Peaceful Uses of Atomic Energy, Geneva
31 Aug-9 Sep 64.

L 24212-65 EWT(m)/EPF(c)/EPF(n)-2/EPR Pr-4/Pe-4/Pu-4 DM

ACCESSION NR: AP5001265

S/0089/64/017/006/0439/0448

AUTHOR: Polushkin, K. K.; Yemel'yanov, I. Ya.; Delens, P. A.; Zvonov, N. V.;
Aleksenko, Yu. I.; Grozdev, I. I.; Kuznetsov, S. P.; Sirotkin, A. P.; Tokarev,
Yu. I.; Lavrovskiy, K. P.; Brodskiy, A. M.; Belov, A. R.; Borisnyuk, Ye. V.;
Gryazev, V. M.; Tetyukov, V. D.; Popov, D. N.; Koryakin, Yu. I.; Filippov,
A. G.; Petrochuk, K. V.; Khoroshavin, V. D.; Savinov, N. P.; Mashcheryakov,
M. N.; Pushkarev, V. P.; Suroyegin, V. A.; Gavrilov, P. A.; Podlazov, I. N.;
Rogozhkin, I. N.

TITLE: Atomic electric power installation "Arbus" with organic coolant and moderator

SOURCE: Atomnaya energiya, v. 17, no. 6, 1964, 439-448

TOPIC TAGS: small nuclear reactor, organic coolant, organic moderator, reactor economy, nuclear reactor

ABSTRACT: The paper is a summary of the SSSR # 307 report at the Third Inter-

Cord 1/2

L 24212-65

ACCESSION NR: AP5001265

national Conference on Peaceful Uses of Atomic Energy, 1964. It describes an installation of a reactor in which organic liquid serves as the coolant, and as the moderator. The low-power reactors of about 5 Mw are expected to be economical in the remote regions where the usual energy sources are not available. A regeneration system is described for the coolant which removes the products of radio-lysis. Orig. art. has: 7 figures

ASSOCIATION: None

SUBMITTED: 00

ENCL: 00

SUB CODE: NP

NR REF SOV: 000

OTHER: 000

Card 2/2

POLUSHKIN, K.P., inzh.

Welding elements of a hydraulic turbine spiral chamber on assembly
platforms. [Trudy]LMZ no.11:244-254 '64. (MIRA 17:12)

Welding radial-axial hydraulic turbine rotors in assembly. Ibid.:255-
258

POLUSHKIN, Konstantin Petrovich; MURZIN, A.P., retsenzents; ZUBOV,
I.N., red.; SOBOLEVA, Ye.M., tekhn. red.

[Installation of hydraulic turbine-generator units] Montazh gidroagregatov. Moskva, Gosenergoizdat, 1963. 534 p.
(MIRA 17:2)

POLUSHKIN, Konstantin Petrovich; ZUBOV, I.N., red.; ZABRODINA, A.A., tekhn.
red.

[Efficient installation of turbine-generator units] Ratsional'nyi
montazh krupnykh gidroagregatov. Moskva, Gos. energ. izd-vo, 1957.
81 p. (MIRA 11:4)
(Hydraulic turbines)

POLUSHKIN, K.P., inzh.

Organizational planning in conducting mechanized assembly operations.
Nov. tekhn. mont. i spets. rab. v stroi. 21:26-27 Je '59.
(MIRA 12:8)

(Building machinery) (Precast concrete construction)

POLUSHKIN, K.P., inzh.

Contemporary installation of hydraulic units and the tasks of
power machinery manufacturers. Energomashinoostroenie 6 no.4:42-
46 Ap '60. (MIRA 13:8)
(Hydraulic machinery)

NIKIFOROV, I.V., inzh.; RUDNIK, A.G., inzh.; POLUSHKIN, K.P., inzh.,
red.; YEMBAYEV, M.F., red.; ALIMPIYEVA, R.V., red.; MODLIN,
G.D., tekhn. red.

[Practictices in the assenbly of the hydraulic units of the
Volga Hydroelectric Power Station (Lenin)] Iz opyta montazha
gidroagregatov Volzhskoi GES imeni V.I.Lenina. Kuibyshev,
Energostroi, 1959. 82 p. (MIRA 15:8)
(Volga Hydroelectric Power Station (Lenin))

112-57-7-14219

Translation from: Referativnyy zhurnal, Elektrotehnika, 1957, Nr 7, p 64 (USSR)

AUTHOR: Polushkin, K. P.

TITLE: Shortening the Erection Time of Water-Power Equipment
(O sokrashchenii tsikla montazha gidrosilovogo oborudovaniya)

PERIODICAL: Tr. 2-go nauch. -tekhn. soveshchaniya po proyektirov. i str-vu
gidroelektrostantsiy. M. - L. (Transactions of the Second Scientific and
Engineering Conference on Designing and Building of Hydroelectric Stations),
1956, pp 149-161

ABSTRACT: In 1952, for the first time, a new method of speedy (simultaneous)
erection of water-power equipment was used at the Upper Svir' hydroelectric
station, as suggested by engineer Barkovskiy in 1949. Turbine parts to be em-
bedded in the foundation were laid right on the spot, without rough surfaces of
the concrete joints, long before the turbine room was built. The gate appara-
tus was erected simultaneously with concrete work, and large subassemblies
of turbines and generators were prepared on outdoor platforms. Later on, at
Tsimlyanskaya hydroelectric station, a specially-equipped outdoor assembling

Card 1/2

SAVEL'YEV, V.P.; KOVAL'SKAYA, A.V.; BERUKOV, F.V.; GALKIN, Yu.P.; KROKHOTIN, A.I.; SINEGUBKIN, V.V.; EPSHTEYN, A.L.; TSIRKIN, M.Z.; LAVRUSHINA, N.S.; GUBAROV, A.A.; KONTOVICH, L.M.; KOROLEV, V.N.; USTRENEZ, I.L.; KURNAKOV, S.N.; POLUSHKIN, M.K.; LIBE, N.A.; IVANOV, N.P.; D'YACHENKO, G.I.; FILIPPOV, I.F.; KHUTORETSKIY, G.M.; VARTAN'YAN, G.P.; RUSOV, Ye.Kh.; BARKAN, L.Z.; KOLONEKAYA, L.M.; GORBATENKO, F.I.

Inventions, Energ. i elektrotekh. prom. no.4:39 C-D '64. (MIRA 18:3)

POLESHKIN, N.A., inzh.; LOGANOV, M.I., inzh.

Improving the technology of making Kh18Ni9Ti stainless steel.
Stal' 25 no.12:1097-1098 D '65. (MIRA 18:12)

1. Gor'kovskiy metallurgicheskiy zavod.

AKIMENKO, A.D.; ASTROV, Ye.I.; SKVORTSOV, A.A.; POLUSHKIN, N.A.; KLIPOV, A.D.

Effect of the intensity of secondary cooling on the quality of continuous casting. Stal' 24 no.12:1088-1089 D '64.

(MIRA 18:2)

1. Gor'kovskiy politekhnicheskoy institut im. Zhdanova,
TSentral'nyy nauchno-issledovatel'skiy institut chernoy
metallurgii imeni I.P. i Gor'kovskiy metallurgicheskiy zavod.

POLUSHKIN, N.P., inzh.

Automatic group control of hydraulic turbines and generator units.
Elek. sta. 36 no.10:56-59 0 '65.

(MIRA 18:10)

POIUSHKIN, N.P., inzh.

Results of tests under actual operating conditions designed to determine the power characteristics of the gate apparatus of adjustable-blade hydraulic turbines. Energomashinostroenie 11 no.5:38-40 My '65. (MIRA 18:6)

PHASE I BOOK EXPLOITATION

SOV/3843

Polushkin, Nikolay Petrovich

Montazh, naladka i ispytaniye avtomaticheskikh regulyatorov skorosti gidroturbin
(Assembling, Adjusting, and Testing Hydraulic Turbine Governors) Moscow,
Gosenergoizdat, 1959. 201 p. 2,500 copies printed.

Ed.: I.N. Zubov; Tech. Ed.: Ye. M. Soboleva.

PURPOSE: This book is intended to improve the qualifications of workers and foremen engaged in the assembly and operation of hydraulic turbine speed regulating systems. It may also be of value to young specialists in this field.

COVERAGE: The book contains general information on automatic speed regulation of hydraulic turbines. Basic systems of governors from the simplest mechanisms to the more complex are described. The most commonly used governors and their mechanisms are explained and illustrated. Problems of installing governors on turbines are covered and troubleshooting is described. The author expresses his thanks to N.K. Barkov, I.N. Zubov, B.A. Rabotov, K.P. Polushkin, and M. P. Sviyazheninova for help in preparing the book. There are 13 references, all Soviet.

~~Card 1/4~~

POLUSHKIN, N.P., inzh.

Study of the automatic closing of distributors on hydraulic
turbines of the Volga Hydroelectric Power Station (22d Congress
of the CPSU). Gidr. stroi. 33 no.11:27-30 N '62. (MIRA 16:1)
(Automatic control)
(Volga Hydroelectric Power Station (22d Congress of the CPSU)—
Hydraulic turbines)

POLUSHKIN, N.P., inzh.

Some shortcomings of automatic hydraulic turbine control systems
and methods for eliminating them. Energomashinostroenie 9 no.11:
35-39 N '63. (MIRA 17:2)

POLUSHKIN, N.P., inzh.

Prospects for increasing the power of Francis-type hydraulic turbines
operating them at decreased pressures. Energ. stroi. no.34:66-69 '63.
(MIRA 17:1)

1. Leningradskiy filial Vsesoyuznogo instituta po proyektirovaniyu
organizatsiy energeticheskogo stroitel'stva.

POLUSHKIN, N.P., inzh.

Improved method for statistical balancing of the rotor wheels
of hydraulic turbines and centrifugal pumps. Energetik 11
no.3:1-4 Mr '63. (MIRA 16:4)

(Hydraulic turbines) (Pumping machinery)

8/091/63/000/003/001/001

AUTHOR: Polushkin, N. P., Engineer

TITLE: An improved method for static balancing of hydraulic turbine runners and centrifugal pump impellers

PERIODICAL: Energetik, no. 3, 1963, 1-4

TEXT: The most prevalent cause of vibration in hydraulic turbines is improper balancing of runners, which is aggravated by increases in power and operating speeds. The same considerations apply to centrifugal pump impellers. The proposed method ensures static balancing either in water or in air. The runner is balanced first in water, then the resulting unbalance in air is determined and compensated by a balancing weight q . The runner is balanced again in water by placing a counterweight of heavier material G_{he} opposite q ; to ensure balancing in air q must have an increment added so that $q + \Delta q = G_{ll}$ (balancing weight of lighter metal) and since the increment Δq must equal G_{he} in air

$$q = G_{ll} - G_{he} \quad (1)$$

Card 1 of 2

An improved method for

8/091/63/000/003/001/001

To maintain static balancing of the runner in water, the weights G_{11} and G_{he} must weigh the same in water:

$$G_{11} - V_{11}\gamma_{wa} = G_{he} - V_{he}\gamma_{wa} \quad (2)$$

where V_{11} and V_{he} represent volumes of the weights and γ_{wa} is the specific gravity of water. Formulas were derived for calculating the sizes and volumes of the weights and one figure showed their distribution on the runner rim.

Card 2 of 2

LASHKOV, Anatoliy Stepanovich; POLUSHKIN, Nikolay Petrovich; BOZHKO-
STEPANENKO, G.M., inzh., red.; SOKOLOV, D.A., red.; ~~VELITSYN,~~
V.L., tekhn. red.

[Results obtained from testing hydraulic units of hydroelectric
power stations in dams] Nekotorye rezul'taty ispytaniy gidroagrega-
tov priplotinnykh gidroelektrostantsii. Moskva, Orgenergostroi,
1959. 58 p. (MIRA 14:6)

(Hydroelectric power stations)

POLUSHKIN, Nikolay Petrovich; BARKOV, N.K., retsenzent; ZUBOV, I.N.,
red.; SOBOLEVA, Ye.M., tekhn.red.

[Assembly, adjustment, and testing of automatic speed
regulators for the hydraulic turbines] Montazh, naladka i
ispytanie avtomaticheskikh reguliatorov skorosti gidroturbin.
Moskva, Gos.energ.izd-vo, 1959. 201 p. (MIRA 13:2)
(Hydraulic turbines)

POLUSHKIN, N.P., kandidat tekhnicheskikh nauk.

"Governing hydraulic turbines." IU.E. Garkavi, M.I. Smirnov.

Reviewed by N.P. Polushkin. Elek.sta. 27 no.9:62-64 S '56.

(MLRA 9:11)

(Hydraulic turbines)

(Garkavi, IU.E.)

(Smirnov, M.I.)

POLUSHKIN, N.P., inzhener.

Improving frequency control Elek.sta. 28 no.1:44-49 Ja '57.
(MLRA 10:3)

(Hydraulic turbines)

104-2-5/38

AUTHOR: Polushkin, N.P., Engineer.

TITLE: The determination of forces in the control apparatus of radial-axial water turbines. (Opredeleniye usiliy v napravlyayushchikh apparatakh radialno-osevykh gidro-turbin)

PERIODICAL: "Elektricheskie Stantsii" (Power Stations), 1957, Vol.28, No.2, pp. 25 - 27 (U.S.S.R.)

ABSTRACT: Owing to a fault in the house service supply of a power station the oil pressure pumps operating the turbine control equipment ceased to work. The emergency low oil pressure relay operated to stop the set. However, the valves were not fully closed and the set was not properly stopped because the oil pressure was not sufficient to complete the cycle of emergency stopping.

In order to investigate what had happened special tests were carried out to measure the forces acting on the control gear of the turbine. The forces required to move the control equipment were determined by measuring the pressures in the cavities of the servomotor of the control apparatus when it was first slowly closed and then slowly opened. This slow movement of the servomotor piston was achieved by slow rotation of the handwheel of the speed change mechanism.

Card 1/2

POLUSHKIN, N.P., inzh.

Some remarks concerning the development of turbines for
hydroelectric power stations. Energ. stroi. no.31:57-63 '62.
(MIRA 16:7)

1. Leningradskiy filial Vsesoyuznogo instituta po proyektiro-
vaniyu organizatsiy energeticheskogo stroitel'stva.
(Hydraulic turbines)

1. POLUSHKIN, N.P., ENG.
2. USSR (600)
4. Water Wheels
7. Determining the combined factors of relationship of hydraulic turbines with adjustable blades. Elek.sta. 23 no.9, 1952.

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

POLUSHKIN, N.V.

Chuck for connecting armored cables with the sonde on the sub-
surface instrument. Razved.i prom.geofiz. no.10:48-49 '54.
(MIRA 13:2)

(Prospecting--Equipment and supplies)

BRUDNO, I.; POLUSHKIN, V.

" Approve but do not introduce". Izobr. i rats. no.7:5 J1 '61.
(MIRA 14:6)

(Motor vehicles--Engines--Technological innovations)

POLUSHKIN, M.

The organization and methods of staff training courses. No 11.

Tankist, No 12, 1948.

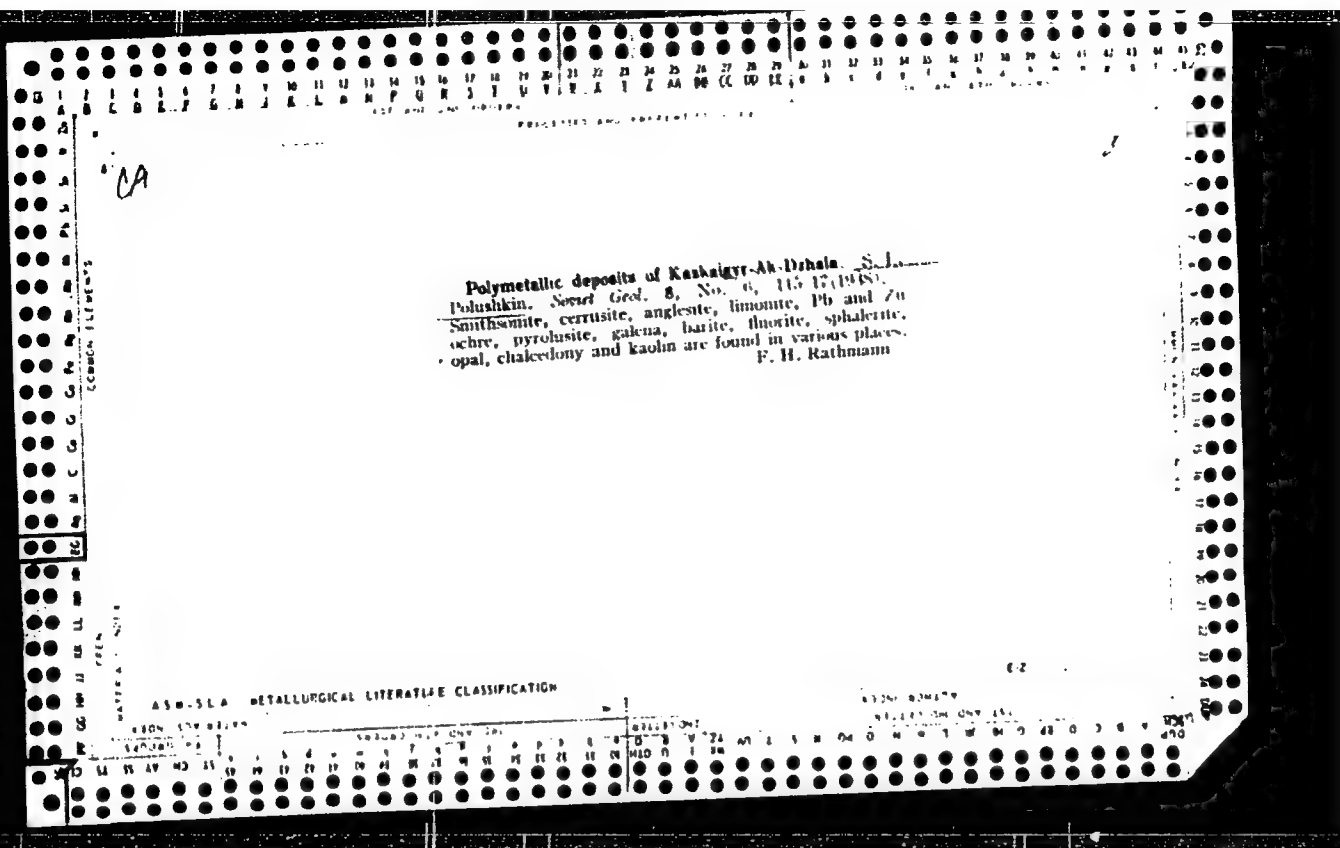
POLUSHKIN, S. L.

"The Geochemical Principles in D. I.

Mendeleyev's Table," Priroda, No. 7,

1949.

Polymetallic deposits of Ak-Chagyl in the northwestern Balkhash District. S. L. Polubnykh, Soviet Geol. N. No. 10, 112-113 (1960). ¹ Ag, Bi, Fe, Cd, Sn, Cu and Pb were found. P. H. Rationmann

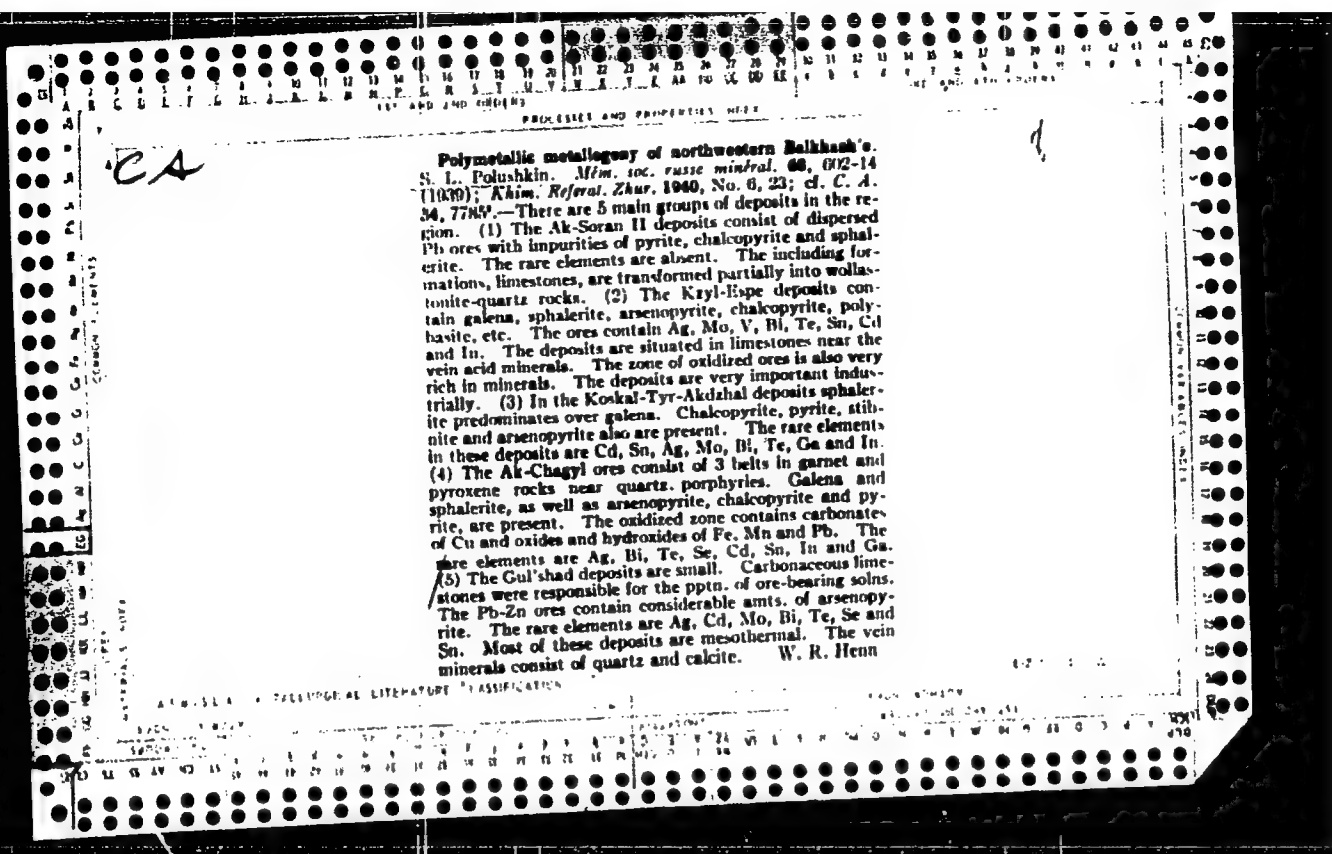


CA

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Cadmium in the polymetallic ores of the northwestern Balkhash region. S. L. Polushkin. *Tretyaya Meda. 13, No. 6, 16-17 (1938); Chem. Zentr. 1939, I, 4900; cf. C. A. 33, 4916.*—The Cd occurs chiefly in the light to honey-colored sphalerites. The black sphalerites of Gulschad with 0.29-0.33% Cd are an exception, which is explained as due to local mineralogical peculiarities. Calcd. on the basis of 100% Zn, the Kaskagir-Ak-Ujal ores contain 1.5% Cd. M. G. Moore

ASB S.L.A. METALLURGICAL LITERATURE CLASSIFICATION



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1ST AND 4TH GROUPS																										2ND AND 3RD GROUPS																									
655 Geochemical Regularities in Mendelyev's Table. S. L. Polubkin. Priroda No. 7, 43(1949)(in Russian). In a short note, with no illustrative examples or a reference to a more explicit work, the author gives the following rule: the atomic numbers of geochemically related elements form repetitions of the sequence of numbers 2, 8, 18, and 32, i.e., the series 2×1^2, 2×2^2, 2×3^2, and 2×4^2. These numbers are the same that form periods in Mendelyev's table.																																																			
ASB-51A METALLURGICAL LITERATURE CLASSIFICATION																																																			
1ST AND 4TH GROUPS																																																			
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POLUSHKIN, V.A.

Principal initial assumptions in information theory, the theory of
optimal coding. NTI no.1:54-57 '64. (MIRA 17:3)

POLUSHKIN, V.A.

Improving the scientific qualifications of workers in
scientific information institutions; practice of the
All-Union Institute of Scientific and Technical Informa-
tion. NTI no.1:14-17 '63. (MIRA 16:8)

POLUSHKIN, V.A.

Defining the concept "information." NTI no.9:6-8 '63.

(MIRA 16:12)

POLUSHKIN, V.A., kand. geograf. nauk

Mechanization and automation of information work. Vest. AN
SSSR 33 no.11:82-85 N '63. (MIRA 17:1)

1. Vsesoyuznyy institut nauchno-tehnicheskoy informatsii
Gosudarstvennogo komiteta po koordinatsii nauchno-issledo-
vatel'skikh rabot SSSR i Akademii nauk SSSR.

MIKHAYLOV, A.I.; POLUSHKIN, V.A.

The theory of scientific information is a new independent
scientific discipline. NTI no.3:3-5 '63. (MIRA 16:11)

POLUSHKIN, V.A.

More efficient use of scientific information in the field of
oceanology. Okeanologiya 3 no.3:537-539 '63. (MIRA 16:8)

(Oceanographic research)

POLUSHKIN, V. A.

AID P - 3062

Subject : USSR/Mining

Card 1/1 Pub. 78 - 16/20

Author : Polushkin, V. A.

Title : ~~Experience of the brigade of S. A. Chumakov in oil well general repair work~~
Experience of the brigade of S. A. Chumakov in oil well general repair work

Periodical : Neft. khoz., v. 33, no. 8, 80-83, Ag 1955

Abstract : Description of various repair works in oil wells of the Tuymazy district performed in 1954 and 1955.

Institution : None

Submitted : No date

POLUSHKIN, V.A., kand.geograf.nauk

Tenth anniversary of the All-Union Institute of Scientific and
Technical Information. Vest. AN SSSR 33 no.3:127-128 Mr '63.
(MIRA 16:3)

(Information services)

POLUSHKIN, V.A.

Studying the currents of the Caspian Sea. Okeanologiya 2 no.1:
143-145 '62. (MIRA 15:2)

1. Vsesoyuznyy institut nauchnoy i tekhnicheskoy informatsii.
(Caspian Sea--Ocean currents)

POLUSHKIN, V.A.

Abstracts office of the International Council of Scientific Unions.
NTI no.5:45-46 '65. (MIRA 18:7)

102-100000 1. 4.
KOZLOV, Vladimir Alekseyevich; KUDINOV, Valentin Vladimirovich; POLUSHKIN,
Vsevolod Alekseyevich; SHUPLOV, Vyacheslav Ivenovich; SUKHORUKOV, P.A.
red.; DIZHUR, I.M., red. ind-va; TIKHONOVA, Ye.A., tekhn.red.

[Fire alarm systems and temperature control for seagoing ships]
Pozharnaya signalizatsiya i temperaturnyi kontrol' na morskoy
transporte. Moskva, Izd-vo "Morskoy transport," 1957. 118 p.
(MIRA 11:2)

(Ships--Fires and fire prevention)

POLUSHKIN, V.I., starshiy inzh.; BAKHTIOZIN, R.A., starshiy inzh.

There is something to be learned from construction workers of
the Chelyabinsk railroad district. Avtom., telem. i sviaz' 5
no.6:42 Je '61. (MIRA 14:9)

1. Laboratoriya signalizatsii i svyazi Kazakhskoy dorogi.
(Chelyabinsk--Railroads--~~Signaling~~)
(Chelyabinsk--Railroads--Employees)

POLUSHKIN, V.I., inzh. (Leningrad)

Merging of air currents flowing from openings of a perforated
grating. Vod. i san. tekhn. no.8:11-14 Ag '65.

(MIRA 18:12)

POLUSHKIN, V.P.

Efficient conditions of reduction on a 2500 wide-strip mill.
Metallurg 8 no.8:26-28 Ag '63. (MIRA 16:10)

1. Magnitogorskiy metallurgicheskiy kombinat.

L 15675-63

BDS

ACCESSION NR: AP3004582

S/0130/63/000/008/0026/0028

AUTHOR: Polushkin, V. P.

TITLE: Optimal conditions for roughing in the wide-strip mill 2500

SOURCE: Metallurg, no. 8, 1963, 26-28

TOPIC TAGS: mill 2500, roughing, trimming

ABSTRACT: The continuous wide-strip mill 2500 MMK was designed for hot rolling of carbon and low-alloy steel plates 1.5-10 mm thick and 1000-2350 mm wide. After the steel strip leaves the last stand, it is cut to the determined length or it is rolled on a reel. The rolls of steel, weighing up to 10 tons, are cooled and conveyed to cutters for a longitudinal or transverse cutting. Steel slabs are delivered to the 2500 mill from a slab mill. The goal of the investigation was to find the optimal slab sizes and a rational distribution of draft in the mill stands which would insure optimal roughing conditions. It was established that the optimal slab thickness for rolling of steel plates 1700-2300 mm wide is 125 mm. The minimum length of the slab should not be less than 2450 mm. The results obtained are tabulated. Orig. art. has: 2 tables.

ASSOCIATION: Magnitogorskiy metallurgicheskiy kombinat (Magnitogorsk Metallurgical Combine)

SUBMITTED: 00

SUB CODE: ML

DATE ACQ: 27Aug63

NO REF SOV: 000

ENCL: 00

OTHER: 000 1/1

COLUNNIN, V.I.; MITSKIN, V.I.

Computer for calculating reduction conditions of the 2500 mill.
Metallurg 10 no.4:27-28 Dec '65. (MIRA 18:6)

1. Magnitogorskiy metallurgicheskiy kombinat.

L. 44005-16 EWT(m)/EWP(t)/T/ETI/EWP(k) IJP(c) JD/HW	
ACC NR: AP6029871	SOURCE CODE: UR/0413/66/000/015/0022/0022
INVENTOR: <u>Voronov, F. D.; Filatov, A. D.; Gun, S. B.; Selivanov, N. M.; Nosov, V. D.; Savel'yev, G. V.; Goncharov, F. I.; Plotnikov, P. I.; Roshkov, S. A.; Kustobayev, G. G.; Polushkin, V. P.; Arkhipov, V. M.; Uziyenko, A. M.; Kolov, M. I.; Kozhevnikov, V. P.; Shapiro, B. S.; Kalugin, V. F.; Grudev, P. I.; Aksenov, B. N.; Khomyachkov, A. P.; Rudakov, Ye. A.; Kuzema, I. D.; Gornzhin, V. V.; Poydyshev, B. N.; Shternov, M. M.</u>	
ORG: none	58 B
TITLE: Method of making <u>high-strength steel plates</u> by <u>pack rolling</u>. Class 7, No. 184232	
SOURCE: Izobret prom obraz tov zn, no. 15, 1966, 22	
TOPIC TAGS: high strength steel, high strength steel plate, high strength steel sheet, steel plate rolling, steel sheet rolling	
ABSTRACT: This Author Certificate introduces a method of pack rolling high-strength steel plates and sheets up to 10 mm thick and up to 3500 mm wide in a carbon steel envelope. The method includes <u>cleaning</u>, <u>coating</u>, making of the pack, heating, rolling and subsequent <u>heat treatment</u>. To ensure an accurate thickness of the plates	
Cord 1/2	UDC: 621.771.23

L 44005-66

ACC NR: AP6029871

or sheets regardless of their location in the pack, the thickness of the envelope must be at least 0,6 of the total initial thickness of the high-strength plates of the pack. [ND]

SUB CODE: 13/ SUBM DATE: 18Jun64/ ATD PRESS: 5070

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